

Appln. No. 09/997,556

Attorney Docket No. 10541-542

I. Listing of Claims

1. (Currently amended): A coolant subsystem for a grinding tool having a spindle and a grinding surface that spins at a predetermined velocity, the coolant subsystem comprising:

~~a nozzle adapted to supply~~ a means for supplying a coolant material at substantially the same predetermined velocity;

~~an arm coupled to said nozzle~~ means for supplying and to said grinding tool and ~~adapted to allow placement of said nozzle~~ means for supplying in multiple positions, each of said positions being substantially tangent to the grinding surface of the grinding tool;

a motor connected to said arm and adapted to move said ~~nozzle~~ means for supplying through each of said positions; and

a controller coupled to said motor and adapted to control the movement of said ~~nozzle~~ means for supplying to supply the coolant material based upon a location of a part relative to the grinding tool.

2. (Cancelled).

3. (Original): The coolant subsystem of Claim 1, wherein said arm is coupled to the spindle of the grinding tool.

4. (Currently amended): The coolant subsystem of Claim 3, wherein said ~~nozzle~~ means for supplying pivots and the grinding tool rotates about the same axis.

-2-

BRINKS
HOFER
GILSON
& LIONE

BRINKS HOFER GILSON & LIONE
PO Box 10395
Chicago, IL 60611-5599

Appln. No. 09/997,556

Attorney Docket No. 10541-542

5. (Original): The coolant subsystem of Claim 3, further comprising a bearing collar coupled around the spindle of the grinding tool and to said arm.

6. (Currently amended): The coolant subsystem of Claim 1, wherein said arm ~~is adapted to allow~~ allows placement of said ~~nozzle~~ means for supplying along an arcuate path.

7. (Currently amended): The coolant subsystem of Claim 1, further comprising a belt coupled to said arm and to said motor ~~and adapted~~ to translate rotation of said motor into movement of said arm.

8. (Currently amended): The coolant subsystem of Claim 1, wherein said controller is a computer numeric control (CNC) device.

9. (Currently amended): The coolant subsystem of Claim 4 8, wherein said CNC device ~~is further adapted to control~~ controls the location of the part.

10. (Currently amended): A grinding system comprising:
a grinding tool having a grinding surface ~~adapted~~ to grind a part;
a spindle connected to said grinding tool;
a first motor coupled to said spindle ~~and adapted~~ to rotate said spindle and said grinding tool, such that the grinding surface spins at a predetermined velocity;
~~a nozzle adapted to supply~~ a means for supplying a coolant material at substantially the same predetermined velocity;

Appln. No. 09/997,556

Attorney Docket No. 10541-542

an arm coupled to said ~~nozzle~~ means for supplying and to said grinding tool and ~~adapted~~ to allow placement of said ~~nozzle~~ means for supplying in multiple positions, each of said positions being substantially tangent to said grinding surface of said grinding tool;

a second motor connected to said arm and ~~adapted~~ to move said means for supplying ~~nozzle~~ through each of said positions; and

a controller coupled to said second motor and ~~adapted~~ to control the movement of said ~~nozzle~~ means for supplying to supply the coolant material based upon a location of the part relative to said grinding tool.

11. (Cancelled).

12. (Original): The grinding system of Claim 10, wherein said arm is coupled to the spindle of the grinding tool.

13. (Currently amended): The grinding system of Claim 10, wherein said ~~nozzle~~ means for supplying pivots and the grinding tool rotates about the same axis.

14. (Previously Presented): The grinding system of Claim 10, further comprising a bearing collar coupled around the spindle of the grinding tool and to said arm.

Appl. No. 09/997,556

Attorney Docket No. 10541-542

15. (Currently amended): The grinding system of Claim 10, wherein said arm ~~is adapted to allow~~ allows placement of said ~~nozzle~~ means for supplying along an arcuate path.

16. (Currently amended): The grinding system of Claim 10, further comprising a belt coupled to said arm and to said motor ~~and adapted~~ to translate rotation of said motor into movement of said arm.

17. (Original): The grinding system of Claim 10, wherein said controller is a computer numeric control (CNC) device.

18. (Currently amended): The grinding system of Claim 17 4, wherein said CNC device ~~is further adapted to control~~ controls the location of the part.

19. through 21. (Cancelled)